# LONG SLAND BOTANICAL SOCIETY NEWSLETTER

May - June 1992 Vol. 2, No. 3

## Reminder

The spring is passing by, and it's time to pay those 1992 dues if you haven't already done so. Please check this issue's mailing label. If the code \*NP\* appears, we haven't yet received your membership renewal.

Membership is \$10.00 per calendar year. Make checks payable to: L.I. Botanical Society and mail to:

Lois Lindberg, Membership

Welwyn Preserve

Crescent Beach Rd.

Glen Cove, NY 11542

If you have received a complimentary newsletter, please indicate if you would like to remain on our mailing list.

# **Arthur Cronquist Dies**

On March 22, 1992, Arthur Cronquist of the New York Botanical Garden died of a heart attack while working on the Intermountain Flora in Utah. The New York Botanical Garden will have a memorial service on May 5, 1992 at 11:00 a.m. For more information contact the New York Botanical Garden. If you wish to submit reminiscences of Dr. Cronquist we will gather them together for the next issue.

### **PROGRAMS**

May 12, 1992 - 7:30 p.m.\*, Dr. George Rogers, "Unusual Roles for Everyday Plants", Uplands Farm Nature Center, Cold Spring Harbor.

June 9, 1992 - 7:30 p.m.\*, Dr. Robert Zaremba, "Fire Management and implications on rare plants", Uplands Farm Nature Center, Cold Spring Harbor.

\*Refreshments start at 7:30 p.m. the program starts about 8:00 p.m.

# Poke-the Jekyll and Hyde of the Long Island Flora

Dr. John Fogg, in his wonderful Weeds of Lawn and Garden (1945) called poke (Phytolacca americana L.) the "Jekyll and Hyde of the plant world," and revealed his horticultural disdain by suggesting "... war should be declared on all suspects [seedlings believed to represent poke] and they should be ruthlessly liquidated." Knowledge gained since Dr. Fogg's 1945 insights has shown him to be more correct in his assessment of the good vs. evil, yin/yang of poke than he could have ever expected.



Beyond being a garden pest, poke is dangerous. The plant is deadly and insidious. At the grossest level, persistent roots in gardens have been mistaken for parsnips with painfully fatal results. The berries look tempting, but their ingestion has killed and sickened many people. There is one report of poke poisoning from human ingestion of birds fed pokeberries, and another from consumption of pokeberry pancakes. Even touching the plants carries risks: researchers a few years ago med proliferation of human white blood cells from mere skin contact. This prompted biochemical research culminating in the discovery of proteins now known as "pokeweed mitogens" (PWM) with awesome power to induce mitosis in vivo and in vitro. Pokeweed mitogens have become valuable and much-studied tools in cancer research. Likewise of considerable interest in the same connection are the plant's antiviral proteins, especially the potent "pokeweed antiviral peptide" (PAP), which blocks viral reproduction. (cont'd)

#### Poke cont'd

All this being so, perhaps Poke Sallet [Salad] Annie of the popular pop song probably should not have been so sanguine about her tasty poke greens, which at one time were even available canned. Edible-plant enthusiasts enjoy the greens picked very young and twice boiled. Modern culinary interest in poke focuses on its rich, red betalain pigments as a source of cheap food coloring. No thank you--in addition to the proteins noted above, poke contains a formidable brew of at least ten toxic saponins, collectively known as "phytolaccosides." Those from one tropical *Phytolacca* species may save lives as an inexpensive molluscicide to control schistosomiasis.

Along the southern Atlantic Coast, across Florida, and along the Gulf Coast, the pokeweeds (especially those adjacent to the sea) tend to have thick leaves with tapered (vs. rounded) bases, short pedicels, relatively few fruits, and upright (rather than the familiar drooping) inflorescences. Some folks regard the Coastal Plain variants as a separate species called *Phytolacca rigida* Small (the differences hold up in common garden experiments); others interpret them as a maritime ecotype not worthy of taxonomic status. Coming northward, the "rigida" characteristics diminish.

Standing on the shore in Jersey City, looking at the Statue of Liberty, I came upon a poke plant with feebly expressed "rigida" features, and Professor Carroll Wood of the Arnold Arboretum had the same experience on Nantucket. Sharp eyes along coastal Long Island may spot traces of this fascinating pattern of variation.

Part of the reason poke is such a garden nuisance is its prowess as a pioneer species. Some authorities believe its natural habitat to be highly disturbed banks and shores. The flowers are evidently self-pollinated, and fruiting is 100%. The black berries on red stalks are one of innumerable examples of red and black in combination on bird-dispersed fruits and seeds. The seeds respond heterogeneously to a given set of circumstances, some germinating far more readily than others. Some germinate after as long as 40 years buried. Thus seedling production is likely whether a set of seeds winds up in a newly disturbed site, or in a site that lies undisturbed for decades.

In sum then, before ruthlessly liquidating the pokeweed on your street, stop and contemplate a native weed responsible for fatalities, a favorite springtime delicacy, a tool helping unravel the mysteries of cancer and of viruses, an engaging taxonomic problem, and an intriguing example of adaptation to bird dispersal. Then liquidate--but don't forget to wear your rubber gloves.-- Dr. George Rogers, Clark Botanic Garden

Fogg, J. M. Jr. 1945. Weeds of Lawn and Garden. University of Pennsylvania Press, Philadelphia. 215 pp.

# Comments on the proposed LIBS Logo

"The Newsletter is looking great. As regards the logo--I can't help feel that Curly Grass Fern is not a plant with a lot of visual appeal on a logo, and that on this one it looks like some sort of menacing squid-like sea creature, about to come ashore at Fire Island. The drawing is very fine--but couldn't we put a flowering plant there--I know Gerardia is overdone, and Birdfoot Violet is a bit corny, but why not a flower? An orchid? Or maybe a Eupatorium--nah, no one knows what that is."--Prof. Ray Welch, Suffolk Community College

"I like your proposed logo. 'The meek [curly grass fern] shall inherit the Earth,' or at least get some welcome recognition. My only suggestion would be to have Long Island in a diffferent color from the Curly Grass, to provide contrast."--Dr. David Hammond, New York Botanical Garden

"I think the Curly Grass Fern logo is simply perfect for LIBS! I really like it."--Carol Johnston, Planting Fields Arboretum

"I saw the new logo proposed for LIBS but I have a concern about the drawings. They look too detailed for use when the logo is printed in a small size. You might want to stylize the shape of the island and the plant so it will print better at a small size. These days many societies are using more stylized logos because they are considered more modern and more easily recognized."--Steven Young, New York Natural Heritage Program

#### New Members

The Long Island Botanical Society is pleased to welcome the following new members:

Stephen Abrams - Searington; Colleen Donahue -Huntington Station; Dr. Eugene Ogden - Delmar; Charles Cetas - Riverhead; Dr. Richard Stalter - St. John's University; Edwin Horning - Fishers Island; Aline Euler - Bayside; Brooklyn Botanic Garden Library - Brooklyn; Arthur Skopec - Whitestone

#### Long Island Mycological Club

The Long Island Mycological Club has Saturday morning (9:30 - 12:30) mushroom forays on Long Island, Guests are welcome. Contact Horst Welzel (516-785-7795) for more information about the forays or about the club.

### **Quillwort Quests**

Part 1. Isoëtes at Lake Ronkonkoma

Quillworts (Isoëtes) are a kind of clubmoss (lycopsid) and, with whiskferns (psilopsids) and horsetails (sphenopsids), are among the earliest of terrestrial plants with vascular tissue. Quillworts had their ascendancy during the Carboniferous Period some three hundred fifty million years ago. They are usually regarded as being derived from whiskferns in the late Devonian, but most recently comparative studies of the DNA of vascular plants have shown these psilopsids to be derived examples of tracheophytes while the three lycopsids (Lycopodium, Selaginella, and Isoëtes) are shown to be the most primitive of all tracheophytes on the basis of the similarity of their DNA to the bryophyte Marchantia (Raubenson & Jansen, 1992). Clubmosses (including quillworts), whiskferns and horsetails are referred to as fem allies with deference to their better known broad-leaves (pteropsid) cousins, the ferns.

During the Carboniferous, quillworts were large, much larger than the foot or so the largest ones grow to today. We would be considered raving mad to claim we had seen an amphibious *Eryops* (ex extinct salamaderlike amphibian) in a Long Island swale somewhere, but these vegetable contemporaries of *Eryops* can still be found if you go out of your way to look for them.

My desire to see a quillwort was born when only a boy in Georgia. There I botanized the granite outcrops at and around Stone Mountain. Shallow basins leached out of the solid granite by the rain are filled with water in the spring and, because they reflect the sky, are known locally as cloud pools. These pools are host to a number of rare and endemic species found nowhere else in the world. Although I saw the tiny figwort, Amphianthus pusillus Torr., blooming in one of these pools, I never saw the endemic Isoëtes melanospora Engelm. This disappointment was still keen twenty years later when (after a long captivity in New York City) I moved to Long Island in 1970.

I set out immediately to find a quillwort and, luckily, there were quillworts on Long Island. At first I mistook the angiosperm pipewort (*Eriocaulon* sp.) for quillwort, but quite fortuitously found leaves of real quillworts floating among debris on the north shore of Lake Ronkonkoma on the same day (11 Jun 1970, *Bookout 102*). The quill-like leaves of *Isoëtes* have quadrangularly arranged air columns and dichotomously forking roots. The presence of both these characters together with conspicuous clusters of megaspores at the bases of the leaves made me certain that I was finally looking at a real quillwort. However, I still had not found the quillworts in their habitat rooted in the soil. (I do not know what agency broke these leaves from the

plants; luckily they float.) Since no plants were seen in shallow water, I knew I had to do some diving although dressed in long pants. I wrote in my field notes, "About forty to fifty feet offshore at a depth of about six feet my fingers passed through dense, wiry masses of what I knew must be the native habitat of Isoëtes. At the surface plants came to light that were fresh and a livinggreen" (notes p. 24). That was the only plant I ever recognized by touch rather than by sight. A phone call to George Kalmbacher at the Brooklyn Botanic Garden confirmed that at their Herbarium there was an unidentified Isoëtes collected by Rollin M. Harper, but on the south shore of Lake Ronkonkoma. I made the determination of I. tuckermanii A. Br. with the aid of descriptions and pictures of the megaspores in Gleason (1963), Fernald (1950) and Fassett (1969). However specimens I sent to C. V. Morton at the Smithsonian's National Herbarium were thought to have been collected too early in the season for reliable identification. Dr. Morton died before he made a positive identification.

On June 19, 1970, I swam underwater around the entire circumference of Lake Ronkonkoma. "Isoëtes tuckermanii A. Br. grows in varying abundance around the entire shore ..." I wrote in my field notes. "It grows in water from two-and-one half or three to six feet deep. although water deeper than six feet was not explored. The south shore of Lake Ronkonkoma drops off very steeply about twenty-five feet (or less) from shore. Isoëtes grows here individually, and the larger individuals were observable, scattered, as the bottom sloped down into darkness. In the shallower water of two to four feet it grows singly at scattered, irregular intervals of from one to five feet apart (or farther where it is scarce). These plants have strongly recurving ... sporophylls. On the north, west and east margins of the Lake it seems to grow in greatest abundance forming very dense, cespitose colonies that carpet the bottom for tens of feet in every direction. These plants have spirally ascending and usually longer leaves. They do not seem to be as well developed with respect to the size of the sporangia and corm as the plants that grow singly ... " (notes p. 29 f.).--Henry Bookout

Fassett, N. C. 1969. <u>A Manual of Aquatic Plants</u>. The University pf Wisconsin Press, Madison.

Fernald, M. L. 1950. <u>Gray's Manual of Botany.</u> American Book Company, Atlanta.

Gleason, H. A. 1963. <u>Illustrated Flora of the Northeastern United States and Canada.</u> Hafner Publishing Company for the New York Botanical Garden, New York.

Raubeson, L. A. & R. K. Jansen. 1992. Chloroplast DNA Evidence on the Ancient Evolutionary Split in Vascular Land Plants. Science 255: 1697-1699.

# DON'T BE BLUE -**KNOW YOUR BLUEGRASSES**

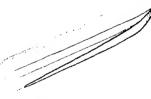
Identifying the genus and some common springtime grasses.

If you want to get into grasses, Bluegrasses are not a bad place to start. But first, read the introduction to a book like Pohl's How To Know the Grasses (1978) or Brown's Grasses (1979). And get a club-member friend to go over grass parts with you. For this article, you need the terms: spikelet, lemma, floret, awn, ligule.

The Bluegrasses (genus Poa) are a worldwide temperate zone genus of about 250 species, eight of which have been reported in Long Island. This article will help you identify the genus and some of the commonest spring species; next issue I'll cover our other species, saving background and systematics for winter leisure.

Taxonomists complain that Bluegrasses look too much alike to analyze easily, but it's not that difficult if you pay attention to a few details.

First: When you suspect you have a Bluegrass, check the leaves (please note: leaves - plural; just one is never safe). Hold a fresh leaf between your thumb and



Typical Poa leaf

forefinger and slide up the leaf past the tip. As the tip goes through your fingers, do you feel that bump? It's made by the "boat-shaped" tip: the edges of the leaf fold upward near the end of the

leaf and meet like the prow of a sleek ship. Avoid dried, broken or split leaves, and if possible, young leaves.

Second: Learn to pull out a floret from the spikelet. All Long Island Bluegrasses except little Annual Blue

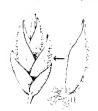




Avena (Oat) tribe. (Glumes shown darkened)

have a "web" of "cotton" at the base of the floret. At first you may want to prop your lens so as to have both hands free, and use a tweezers. But with a bit of practice, you can do it bare- handed. The cobwebby hairs may aid seed dispersal.

Third: Learn the characters of the Bluegrass genus. Like many other grasses, its inflorescence is a (usually



open) panicle, (but some species droop when not flowering). It also shares its spikelet type: two to (more often) several florets underpinned by SHORT glumes. "Short" in glume language means that the top of the longer glume does not reach beyond the top of the lowest floret.\*

Poa-type spikelet. Poa floret with "web.

#### Note that Bluegrass spikelets

- are hairy (either the "web," or hairy florets, or both).
- have a pale, empty floret at the spikelet tip.
- never have awns or split floret tips.
- usually have scarious (papery-white) floret tips
- frequently have rosy, purplish, or silver bluish patches.

#### Five genera that could be confused:

- 1. Fescues (Festuca and Vulpia): have smooth spikelets (here); most are awned.
- 2. Bromes (Bromus): have split floret tips and most are awned.
- 3. Lovegrasses (Eragrostis) are very flatly folded, have many, many florets and 3 clear floret veins. The 5 veins on our Blues are obscure; those that look like 3 have the "web."
- 4. Manna Grasses (Glyceria) have more than 5 clear veins.
- 5. Alkalai Grasses (Puccinellia) have spikelets suspiciously like Bluegrass, but if you're looking at one, you're standing in a salt marsh or meadow, habitats to which the Bluegrasses have not adapted.

#### Look for these four common (and alien!) species:

Kentucky Bluegrass. Poa pratensis L. Widespread on roadsides, open trails, and moist to dryish meadows; a famous lawn (and bunch-) grass. Green foliage (spikelets sometimes bluish); averaging 1.5 - 2 feet high. Runners usually produce several clumps in an area. Lowest panicle branches in 5's (4's), spreading out like a whorl (though they come from one side). Spikelets more or less crowded towards tips of branches. Lots of "web" (but not on all lawn varieties).

<sup>\*</sup>But I wouldn't bet on Poa nemoralis, as we'll see next issue.

#### Don't Be Blue Cont'd

Rough Bluegrass. *Poa trivialis* L. If you're in a more or less shady, wettish area, and you think you have Kentucky Blue (and especially if it seems slightly oversized), test the leaf sheaths and the stem just under the panicle for a scratchy (scabrous) texture. Also, the ligule is quite long - about 1/4 inch. Check it out at the Brooklyn Botanic Garden, along the brook at the Monocot Plot.

Bulbous Bluegrass. *Poa bulbosa* L. An unmistakable grass of weedy spots and fields. Short and chunky, its spikelets mostly turn to potential new plants: the florets develop into tiny, slender leaves, producing a characteristic thick, darkish inflorescence. Good drawing in Hitchcock and Chase's *Manual of Grasses...*, (Hitchcock & Chase, 1971) p. 124. (Eric Lamont reports this aggressive species as common on the East End - try the Riverhead High School campus).

Canada Bluegrass. *Poa compressa* L. More on this next issue (it blooms all summer), but watch for this wiry, FLAT-stemmed, spare, and BLUE-green, bluegrass in dry, open 'tough' areas, starting late June.

Special note: Native Woodland Bluegrass. *Poa alsodes*. Keep your eyes open in rich woods for this SMOOTH shade-lover, which was reported on Long Island once when Brooklyn was still a suburb. It has 2 or 3 florets per spikelet, a SHORT ligule, and an open, lax upper particle with the lower branches slowly emerging, erect from the upper sheath. Be the first to find it!--Naomi Dicker.

Drawings by Laura Vogel, used with permission.

Brown, L. 1979. Grasses, an identification guide. Houghton Mifflin, Boston. 240 pp.

Hitchcock, A. S. & A. Chase. 1971. Manual of the Grasses of the United States. Dover Publications, New York. 2 vol.
Pohl, R. W. 1978. How to know the Grasses. Third edition. Wrn. C. Brown Co., Dubuque. 208 pp.

#### LIBS Brochure

A committee will meet this spring to decide which photographs will be included in the new brochure on the L.I. Botanical Society. If interested in participating, please call Eric Lamont at 516-722-5542.

Several wildflower photographs have been submitted for consideration; however, we still need characteristic L.I. habitat photos.

# L.I.B.S. Field Trips

- 31 May 92 Chaumont Barrens Bob Zaremba will host this field trip which will take us upstate New York, northeast of Watertown. Chaumont is a new Nature Conservancy preserve of 1500+ acres and supports a distinctive grassland community on thin soil over limestone bedrock. This fascinating area with many of the charactersitics of midwestern grasslands supports 15 state-rare plants including Geum triflorum and Cypripedium arietinum, which should both be in bloom. Because of the distance, it will probably be best to stay overnight Sat. in the Watertown area. It may also be possible to break up the long trip on Saturday with a stop at several natural areas between L.I. and Watertown. For information contact Bob Zaremba at 518-869-6959.
- 14 June 92 Deep Pond/Sunken Lake Bill Paterson will guide us through the Oak/Pine Barrens of Camp Wauwepex. While hiking through camp we will see Deep Pond, one of Long Island's most picturesque kettlehole lakes. We will also hike down into Sunken Lake, one of the island's deepest and most impressive kettleholes to see what its floating bog mat has to offer. Directions: take the L.I.E. to exit 69, go north on Wading River/Manorville Rd., Camp Wauwepex is located between Rte 25 and 25A. After crossing Rte 25 northbound, the camp entrance is on the right side of the road immediately after the trailer park. Meet at the parking lot just opposite the Ranger Station, 9:30 am.
- 11 July 92 Nellie Hill Preserve, Dutchess County, Leader, Bob Zaremba. Directions and information in the next newsletter.
- 25 July 92 Sunken Meadow State Park, Leader, Joel Cook. Directions and Information in the next newsletter.

#### Costa Rica Trip Update

Our itinerary is being finalized by our travel agent. Dates are from 2 January to 14 January 1993. Our stops include Poas Volcano, Guanacaste, Monteverde Cloud Forest Preserve, and La Selva. Land costs will be approximately \$1500 per person (includes all), airfare should be about \$450. Participants will be contacted soon - we need to make a booking deposit. Call Skip or Jane Blanchard for information (516-421-5619).

# Plant collecting on state lands

Beyond the ethical questions every botanist poses to himself or herself before collecting voucher specimens and other plants, are the additional hurdles of obtaining proper permissions. By following certain steps, we derive the benefits of protecting ourselves from trespass claims, protecting plant populations (and thus habitat for wildlife) from unnecessary destruction and, in the case of public lands, protecting the property of the people. As LIBS members who observe the rules and requirements for collecting on public lands, we also set good examples for others to follow.

Lands held by New York State for park or forest preserve purposes are protected under laws meant to serve all New Yorkers. Many of us are aware of the "Protected Plant" list in New York, which names the species found in the State that are considered "endangered," "threatened," "rare," and "exploitably vulnerable." This list, which appears in NYCRR Part 193.3, was created as a result of Title 15 of the Environmental Conservation Law. The law requires us to obtain permission of landowners prior to picking, removing or damaging any of the plants listed.

Another law, perhaps less known, further protects plants that grow on State-owned lands. It appears in Section 190.8 of Title 6 of the Environmental Conservation Law. It states,

"No person shall deface, remove, destroy or otherwise injure in any manner whatsoever any tree, flower, shrub, fern, moss or other plant, rock, fossil or mineral found or growing on State land, excepting under permit from the Commissioner of Environmental Conservation and the Assistant Commisioner for State Museum and Science Service, pursuant to section 233 of the Education Law as amended by chapter 121 of the Laws of 1958, nor shall songbirds and their nests and other wildlife be molested or disturbed at any time, except open season therefor, if any."

So, how do we get permission from these authorities?

First, we must be somewhat organized and know where we want to go, what we want to collect, and why we want to collect it.

Once we've surmounted this occasionally daunting obstacle, we must contact the Forestry Division at the regional office of the New York State Department of Environmental Conservation (NYSDEC). On Long Island, the office is on the S.U.N.Y. campus in Stony Brook (call 516-751-1596). There we may request to fill out an application for a Temporary Revocable Permit (TRP) and a form that will be reviewed by the

NYS Museum. The NYSDEC will forward the application to the NYS Museum. The fee for the permit will be waived for nonprofit or public agencies.

In a week or two, we will obtain permission to do the collecting, provided the reviewers of our application determine that our need to collect is justufied. It is likely the NYS Museum will deny the request unless the collection is for public purposes, such as for inclusion in the herbarium of a public facility or botanic garden.

Plants growing on State lands that appear on the Protected Plants list also may be collected using this system, providing such collection is for education or scientific purposes.

For **State Parks**, the above steps must be followed, but we must **add two additional steps**. With our permit approved by NYSDEC and the NYS Museum already obtained, we must contact the permit supervisor of the State Park Region and the park manager of the park in which we wish to collect. Although this may seem redundant, it is advisable to observe this requirement. In addition, most park managers are highly interested in the parks' plant life and would be eager to have access to any information we could provide.

On Long Island, the regional State Parks headquarters is in Belmont Lake State Park (516-669-1000) in Babylon. We should send the permit supervisor a letter with the details of our desired collecting (why, where, what, how...) and a copy of our NYSDEC/NYS Museum permit. We may request a permit that lasts up to one year in duration. Once all our paperwork is in order, we also should contact the park manager of the specific park in which we wish to collect and explain our intentions. Although this step may seem a formality, it perhaps is the most important for establishing a relationship of trust and demonstrating professional conduct.

To all LIBS collectors, best wishes for luck, patience, restraint, and organizational skills!--Louisc Harrison

#### <u>Adresses</u>

Division of Forestry NYSDEC Bldg. #40 S.U.N.Y. at Stony Brook Stony Brook, NY 11790-2356 (516) 751-1596

Permit Office LI State Park Region P.O. Box 247 Babylon, NY 11702 (516) 669-1000

#### South Fork and Mashomack trips

Here is a list of trips scheduled by The Nature Conservancy. For more information call 516-725-2936 or if the trip is to Mashomack call 516-749-1001.

2 May 92 - "Grace Estate Tour"; 3 May 92 -"Woodlands & Meadows", Mashomack Preserve; 9 May 92 - "Mashomack By Water"; 15 May 92 - "Roadside Wildflower Workshop", at Guild Hall in East Hampton; 17 May 92 - "Bird Watch & Breakfast, at Mashomack"; 17 May 92 - "Spring at Big Reed Pond"; 23 May 92 -"Gardiner's Bay Hike", Mashomack: 24 May 92 - "Owl Pond Odyssey"; 30 May 92 - "Sunset Stroll", Mashomack's beaches; 6 June 92 - "Wildflower Drawing Workshop"; 6 June 92 - "Mashomack Canoe Trip"; 23 June 92 - "Check Out the Chicks"; 14 June 92 - "Dune Alpine Stroll"; 14 June 92 - "Woods, Kettles, & Marshes", Mashomack; 20 June 92 -"Osprey Observation", Mashomack; 21 June 92 -"Summer Solstice at Scallop Pond"; 27 June 92 -"Saltmarshes of Shinnicock Bay"

#### Torrey Botanical Club Field Trips

Here is a list of the field trips scheduled by the Torrey Botanical Club for the next two months. For more information contact Karl Anderson 609-261-2495.

9 May 92 - Bowman's Hill Wildflower Preserve, PA; 16 May 92 - Mahlon Dickerson Reservation, NJ; 23 May 92 - Van Cortlandt Park, Bronx, NY; 31 May 92 -Halle Ravine, NY and Bartlett Arboretum, CT; 6 June 92 - Staten Island Greenbelt, NY; 13 June 92 -Hunterdon and Somerset Counties, NJ; 21-25 June 92 -Chambersburg, PA; 27 June 92 - Merrill Creek Reservoir, NJ.

#### Native Plants in the Landscape

A conference on Native Plants in the Landscape will be held at Millersville University in Pennsylvania, June 25-27. For more information contact Grace Evans, Dept. of Continuing Education, 104 Diworth Hall, Millersville U., Millersville, PA 17551, (717) 872-3030.

#### Environmentally "Sound Gardening"

A symposium on Environmentally "Sound Gardening" will be held April 11, 1992. Sponsored by Cornell Cooperative Extension of Nassau and Suffolk Counties and The New York Sea Grant Extention Program. Registration deadline is April 5. For more information contact Cornell Cooperative Extension of Nassau County, Plainview Complex, Building J, 1425 Old Country Road, Plainview, NY 11803-5015.

# **LIBS Programs**

May 12, 1992 - 7:30 p.m.\*, Dr. George Rogers, "Unusual Roles for Everyday Plants", Uplands Farm Nature Center, Cold Spring Harbor.

The presentation, illustrated with slides, will focus on obscure roles of familiar wild and cultivated plants in human affairs. Included will be pre-Columbian cultivars of "weeds," a Native American botanical cancer treatment that has persisted in modern medicine, new medical possibilites for ginkgo and artemisias, the sad history of spigelias in North America, the confused history of tobacco in the Americas, sassafras in its heyday, and how the benefits of foxglove came to be known.

June 9, 1992 - 7:30 p.m.\*, Dr. Robert Zaremba, "Fire Management and implications on rare plants", Uplands Farm Nature Center, Cold Spring Harbor.

Dr. Robert Zaremba will talk about the development of fire management programs, and discuss plant species that are rare due to the loss of fire in nartural communites.

\*Refreshments start at 7:30 p.m., program begins about 8:00 p.m.

#### Pennsylvania Field Trip

The Annual Joint Field Meeting of the Northeastern Section of the Botanical Society of America, the Torrey Botanical Club, and the Philadelphia Botanical Club will be held on June 21 to June 25 (Sunday to Thursday) at Wilson College in Chambersburg, PA. Field trips are planned to a variety of habitats in Pennsylvania, Maryland, and nearby West Virginia, including diabase outcrops, marl marshes, flood plains, vernal ponds, the C & O canal, and upland and lowland forests. Evening programs will deal with various aspects of the flora and ecology of Pennsylvania.

The cost will be \$170.00 per person, double occupancy; this includes eleven meals and four night's housing, plus trips, local trasportation, and evening programs. Space is limited and prior registration is required. For full details and registration information, contact Field Meeting Chairman Larry Klotz, Biology Department, Shippensburg University, Shippensburg, PA 17257 (717) 532-1402. or Karl Anderson (609) 261-2495.

\*\*\*Don't Forget your Dues\*\*\*\*

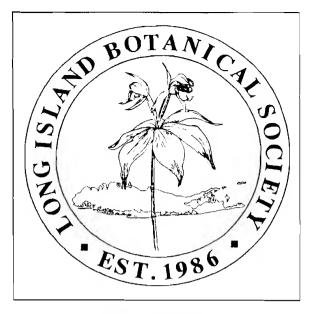
The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

INVESTIGATION OF THE PROPERTY OF THE PROPERTY

President Eric Lamont Vice President Chris Mangels Carol Johnston Treasurer Recrd Sec'y Barbara Conolly Jane Blanchard Cor'sp Sec'y Local Flora Skip Blanchard Field Trip Al Lindberg Lois Lindberg Membership Conservation Louise Harrison John Turner Hospitality Nancy Smith Joanne Tow Eric Lamont Program Steven Clemants Editor

Membership

Membership is open to all, and we welcome any new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership chairperson, Welwyn Preserve, Crescent Beach Road, Glencove, NY 11542.



LIBS LOGO? #2

Above is a second proposed LOGO for the Long Island Botanical Society submitted by Eric Lamont. Please let us know what you think of it. Send comments to Eric Lamont, 586-H Sound Shore Road, Riverhead, NY 11901.

LONG ISLAND BOTANICAL SOCIETY P.O. BOX 905 LEVITTOWN, NY 11756 1-0903